

इंटरनेट

मानक

Disclosure to Promote the Right To Information

Whereas the Parliament of India has set out to provide a practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, and whereas the attached publication of the Bureau of Indian Standards is of particular interest to the public, particularly disadvantaged communities and those engaged in the pursuit of education and knowledge, the attached public safety standard is made available to promote the timely dissemination of this information in an accurate manner to the public.

“जानने का अधिकार, जीने का अधिकार”

Mazdoor Kisan Shakti Sangathan

“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 10866 (1984): Abrasives Dental [MHD 8: Dentistry]



“ज्ञान से एक नये भारत का निर्माण”

Satyanarayan Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”

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Indian Standard

SPECIFICATION FOR
ABRASIVES, DENTAL

1. Scope — Specifies material and dimensional characteristics of grinding instruments used in dentistry.

2. Material

2.1 The abrasive material used shall be either silicon carbide or aluminium oxide, as specified by the purchaser.

2.2 The bond used shall be of the vitrified type, but subject to agreement between the purchaser and the supplier, resin, silicate or shellac bond may also be used.

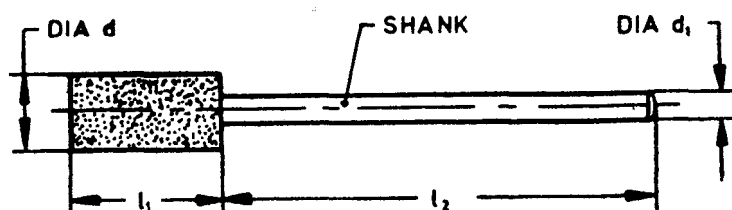
2.3 Unless specified otherwise, the shank shall be made of tool steel conforming to designation T83W6Mo5Cr4V2 or T72W18Cr4V1 of IS : 7291-1974 'Specification for high speed tool steels'.

3. Grades — The grades shall be as given below :

Grade	Grit Size
Coarse	36/46
Medium	54/60
Fine	80/100

4. Shape and Dimensions — The dimensions shall be as specified in Fig. 1 to 5 (for designation of nominal sizes, see IS : 10307-1982 Nominal sizes and designation of working parts of burs and cutters, dental). The symbols used for various dimensions in these figures are as given below:

- d diameter of the working part,
- d_1 diameter of the shank,
- l_1 length of the working part, and
- l_2 length of the shank.



Size Designation	d +0.5 0.0	l_1 + 1.0 - 0.5	l_2 \pm 3.0	d_1 0.000 - 0.016
050	5.0	12.0	36.0	2.350
065	6.5	13.0	37.0	2.350

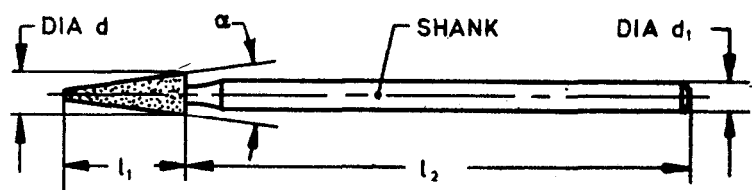
All dimensions in millimetres.

FIG. 1 ABRASIVE, CYLINDRICAL, DENTAL

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Gr 2

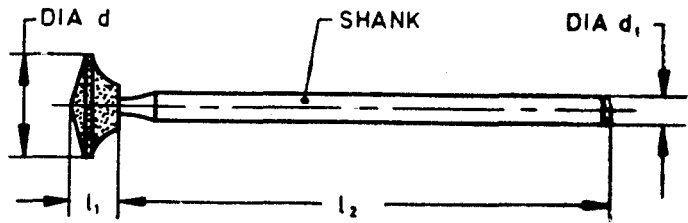


Size Designation	d +0.5 0.0	l_1 + 1.0 - 0.5	l_2 ± 3.0	d_1 0.000 - 0.016
030	3.0	7.0	39.5	2.350
035	3.5	10.5	43.0	2.350

$\alpha = 6 \text{ to } 10^\circ$

All dimensions in millimetres.

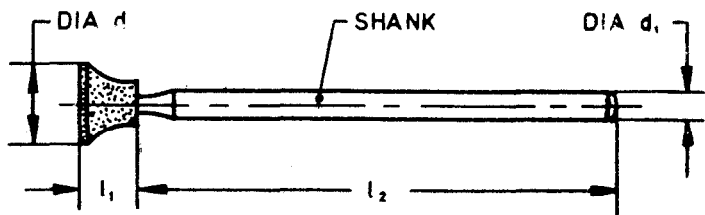
FIG. 2 ABRASIVE, CONICAL, TRUNCATED, DENTAL



Size Designation	d +0.5 0.0	l_1 + 0.5 0.0	l_2 ± 3.0	d_1 0.000 - 0.016
090	9.0	4.0	42.0	2.350

All dimensions in millimetres.

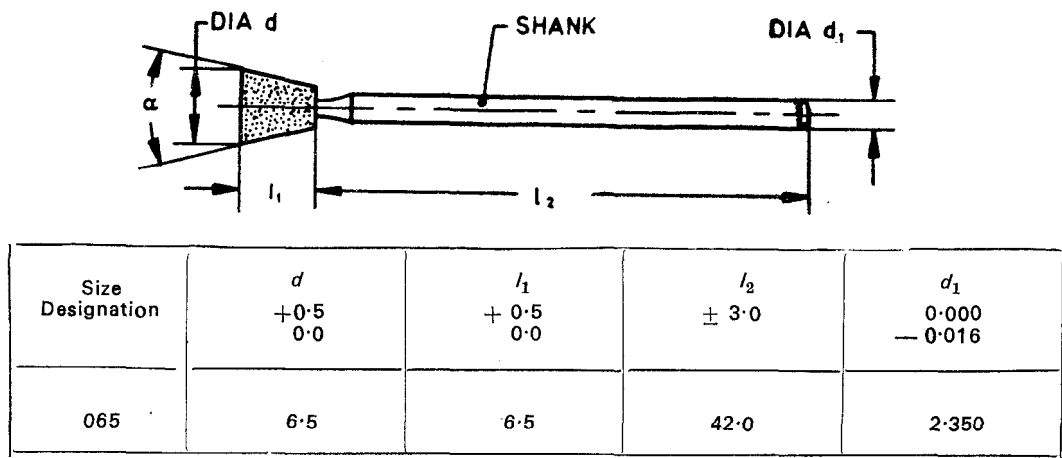
FIG. 3 ABRASIVE, KNIFE EDGED, DENTAL



Size Designation	d +0.5 0.0	l_1 + 0.5 0.0	l_2 ± 3.0	d_1 4.000 - 0.016
070	7.0	5.0	41.0	2.350

All dimensions in millimetres.

FIG. 4 ABRASIVE CONCAVE, CONICAL, DENTAL INVERTED



$\alpha = 20$ to 30°
All dimensions in millimetres.
FIG. 5 ABRASIVE, INVERTED CONICAL, TRUNCATED, DENTAL

5. Heat Treatment — The shank shall be uniformly hardened and tempered to a hardness of 240 HV, Min.

6. Tests

6.1 Measurement of Shank Diameter — The shank diameter shall be measured with tungsten carbide ring gauges checked regularly with mating plugs, air gauges or dial indicators (0.001 mm graduations).

Note — In the event of dispute concerning the measured shank diameter, the referee method shall be the one using tungsten carbide ring gauges.

6.2 Measurement of Other Dimensions — The other dimensions shall be measured with appropriate gauges or calibrated blade-type micrometer calipers. The cone angle shall be measured with a tool maker's microscope.

6.3 Test for Joint — The joint shall be tested by holding the shank of the instrument vertically in a suitable vice. A vertical force of 50 kg (500 N approximately) shall be applied on the working end of the instrument for two minutes. It shall not show any sign of damage after the test.

7. Marking — Each instrument shall be legibly and indelibly marked with the nominal size of the abrasive, and manufacturer's name, initials or recognized trade-mark.

7.1 ISI Certification Marking — Details available with the Indian Standards Institution.

8. Packing — Each instrument shall be wrapped in a wax paper and packed in a carton with soft packing material like expanded polystyrene. The carton shall bear the name, nominal size and shape of the instrument, manufacturer's name or recognized trade-mark and the country of manufacture,

Alternatively, it may be packed as agreed to between the purchaser and the supplier.

EXPLANATORY NOTE

In the preparation of this standard, assistance has been derived from ISO/DIS 7786 'Dental rotary instruments — Dental abrasives', issued by the International Organization for Standardization.